

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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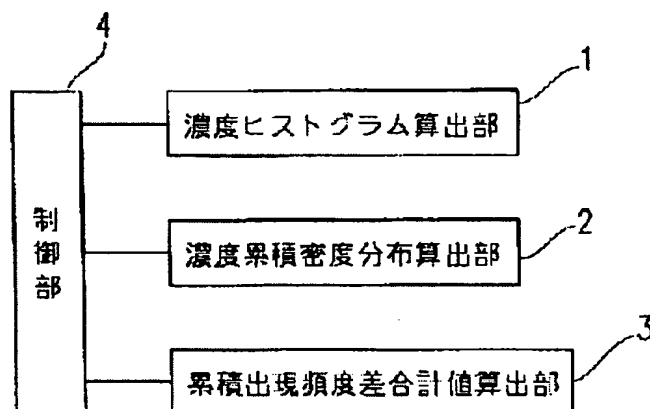
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APPLICANT : SHARP CORP;

INVENTOR : MORISUE HISASHI;

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TITLE : DEVICE AND METHOD FOR  
EVALUATING IMAGE QUALITY AND  
RECORDING MEDIUM



ABSTRACT : PROBLEM TO BE SOLVED: To efficiently and quantitatively evaluate the gradation reproducibility of a digital image without human intervention.

SOLUTION: A gradation reproducibility evaluation device for an outputted digital image obtained in such a manner that an imaging unit images an object in which a density histogram about luminance is known, is provided with a means 1 for calculating a density histogram about luminance of digital image data, a means 2 for calculating an accumulated density distribution about luminance from the density histogram about luminance, and a means 3 for calculating the total value in all luminance values of absolute values of accumulated appearance frequency difference in each luminance from the accumulated density distribution about the luminance of the object and the accumulated density distribution about the luminance of the digital image data. The smaller the total value is, image quality about gradation reproducibility is decided to be the better because the similarity of a density accumulated density distribution between the digital image and the object is high. The larger the total value is, the image quality about the gradation reproducibility is decided to be the worse because the similarity of the density accumulated density distribution between the digital image and the object is low.

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